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| APPLICATION NO.            | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------|-------------|----------------------|---------------------|------------------|
| 10/714,355                 | 11/14/2003  | Steven E. Lentsch    | 163.1204USC3        | 3328             |
| 23552                      | 7590        | 09/09/2005           | EXAMINER            |                  |
| MERCHANT & GOULD PC        |             |                      | DOUYON, LORNA M     |                  |
| P.O. BOX 2903              |             |                      | ART UNIT            |                  |
| MINNEAPOLIS, MN 55402-0903 |             |                      | PAPER NUMBER        |                  |
|                            |             |                      | 1751                |                  |

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

*M*

**Office Action Summary**

*P.P*

Application No.

10/714,355

Applicant(s)

LENTSCH ET AL.

Examiner

Lorna M. Douyon

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 19-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26-35, 41-46 is/are allowed.
- 6) ☒ Claim(s) 19-25 and 36-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

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1. This action is responsive to the amendment filed on June 14, 2005.
2. Claims 19-46 are pending.
3. The objection to the disclosure is withdrawn in view of Applicants' amendment.
4. The terminal disclaimer filed on June 14, 2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US Patent Nos: **6,156,715; 6,410,495; 6,660,707; 6,177,392 and 6,258,765** has been reviewed and is accepted. The terminal disclaimer has been recorded.
5. The rejection of claim 1 under 35 U.S.C. 103(a) as being unpatentable over Gordon et al. (U.S. Patent No. 5,650,017) is withdrawn in view of Applicants' amendment.
6. The rejection of claim 1 under 35 U.S.C. 103(a) as being unpatentable over Hartman et al. (U.S. Patent No. 5,559,089) is withdrawn in view of Applicants' amendment.
7. The rejection of claim 1 under 35 U.S.C. 103(a) as being unpatentable over Bruegge et al. (US Patent No. 5,061,392) is withdrawn in view of Applicants' amendment.

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8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 19-25 and 36-40 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation “wherein the aminocarboxylate comprises diacetic acid, triacetic acid, tetracetic acid or pentaacetic acid” in lines 6-7 of independent claim 19 is nowhere supported in the specification. Examples of aminocarboxylic acids are provided in the specification on page 10, lines 28-31, however, said portion of the specification does not provide support for the generic aminocarboxylate comprising diacetic acid, triacetic acid, tetracetic acid or pentaacetic acid as those recited. Likewise, the limitation “about 10 to 80 wt% alkaline source; the alkaline source comprising alkali metal hydroxide, alkali metal silicate or metasilicate, alkali metal borate, ethanolamines, amines, or mixtures thereof” with the exception of “alkali metal carbonate” in lines 3-5 of independent claim 36 is nowhere supported in the specification. The specification on page 4 line 23+ states that the “block detergent materials are preferably substantially free of a component that can compete with the alkali metal carbonate...and that the detergent preferably contains less than a solidification interfering amount of a second alkaline source, and can contain less than 5

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wt%.....sodium hydroxide". Hence, said limitation of claim 36 is contradictory to this statement.

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 19 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Backes et al. (US Patent No. 5,665,694), hereinafter "Backes".

Backes teaches a solid, cast detergent prepared from a mixture of 16 grams deionized water, 29 grams of sodium silicate with a  $\text{SiO}_2/\text{Na}_2\text{O}$  ratio of 2.40, 25 grams sodium nitrilotriacetic acid and 28 grams sodium carbonate (see Example I under col. 8). The mixture of ingredients would inherently form the binding agent. Hence, Backes anticipates the claims.

12. Claims 36-37, 39-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Hartman et al. (U.S. Patent No. 5,559,089), "Hartman".

Hartman teaches a dishwashing composition in solid form, e.g., granular or tablets (see col. 1, lines 19-20) which comprises 20 wt% sodium carbonate, 9 wt% silicate: BRITESIL H<sub>2</sub>O ( $\text{SiO}_2/\text{Na}_2\text{O}$  ratio from 2.0 to 2.4) and 0.5 wt% sodium

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hydroxyethyldiphosphonate (HEPD) (see Example IX under col. 24). Hartman teaches the limitations of the instant claims. Hence, Hartmann anticipates the claims.

13. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

14. Claims 36-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon et al. (U.S. Patent No. 5,650,017), hereinafter Gordon.

Gordon teaches detergent tablets for dish washing (see abstract, col. 9, lines 57-61) which comprises from about 1 to about 90% of silica granules which comprises: 1-90% by weight of silica; 0-98% by weight of alkali metal salt of tripolyphosphate; 0-98% by weight of alkali metal carbonate; 0-20% by weight of alkali metal silicate; 0-10% by weight of organic phosphonate and 1-25% by weight of moisture (see col. 7, lines 10-26). Gordon also discloses a silicate having a ratio of 2.8 (see Example 4). Other ingredients include between 5% and 95% by weight of builders like sodium carbonate, phosphates, water-soluble polyphosphonates including potassium salts of ethane-1-hydroxy-1,1-diphosphonic acid and potassium salts of methylenediphosphonic acid (see (col. 10, lines 19-33, 52-55). Gordon, however, fails to disclose a tablet wherein the proportions of the carbonate, silicate and phosphonate are within the bounds presently claimed.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the proportions of sodium carbonate, alkali metal silicate and organic phosphonate of Gordon through routine experimentation for best results. As to optimization results, a patent will not be granted based upon the optimization of result

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effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

15. Claims 26-35 appear to be allowable in view of Applicants' arguments.

#### ***Response to Arguments***

16. Applicant's arguments filed June 14, 2005 have been fully considered but they are not persuasive.

With respect to the rejections based upon Gordon or Hartman, as they apply to the present claims, Applicant argues that each of the references fails to teach E-form hydrate which is a reaction between the water, carbonate and organic phosphonate components of the detergent mixture which forms under conditions such as casting or extrusion.

The Examiner respectfully disagrees with the above arguments because in the presently rejected claims 36-40, no E-form hydrate is required, hence the rejections over Gordon and Hartman are proper and are maintained.

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references are considered cumulative to or less material than those discussed above.

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18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

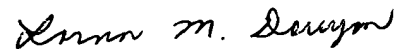
19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is (571) 272-1313. The examiner can normally be reached on Mondays-Fridays from 8:00AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lorna M. Douyon  
Primary Examiner  
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